

# WEST Search History

DATE: Friday, January 10, 2003

## Set Name Query

side by side

## Hit Count Set Name

result set

*DB=USPT; PLUR=YES; OP=AND*

L1 plasmid near50 th-1

2 L1

L2 plasmid near50 th1

25 L2

L3 L2 and (helicobacter or pylori or hpylori)

4 L3

END OF SEARCH HISTORY

**WEST****End of Result Set**

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L3: Entry 4 of 4

File: USPT

Apr 17, 2001

DOCUMENT-IDENTIFIER: US 6218371 B1

TITLE: Methods and products for stimulating the immune system using immunotherapeutic oligonucleotides and cytokines

Detailed Description Text (21):

Both gram negative and gram positive bacteria serve as antigens in vertebrate animals. Such gram positive bacteria include, but are not limited to Pasteurella species, Staphylococci species, and Streptococcus species. Gram negative bacteria include, but are not limited to, Escherichia coli, Pseudomonas species, and Salmonella species. Specific examples of infectious bacteria include but are not limited to: Helicobacter pyloris, Borelia burgdorferi, Legionella pneumophila, Mycobacteria sps (e.g. M. tuberculosis, M. avium, M. intracellulare, M. kansaii, M. gordonae), Staphylococcus aureus, Neisseria gonorrhoeae, Neisseria meningitidis, Listeria monocytogenes, Streptococcus pyogenes (Group A Streptococcus), Streptococcus agalactiae (Group B Streptococcus), Streptococcus (viridans group), Streptococcus faecalis, Streptococcus bovis, Streptococcus (anaerobic sps.), Streptococcus pneumoniae, pathogenic Campylobacter Sp., Enterococcus sp., Haemophilus influenzae, Bacillus anthracis, Corynebacterium diphtheriae, Corynebacterium sp., Erysipelothrix rhusiopathiae, Clostridium perfringers, Clostridium tetani, Enterobacter aerogenes, Klebsiella pneumoniae, Pasturella multocida, Bacteroides sp., Fusobacterium nucleatum, Streptobacillus moniliformis, Treponema pallidum, Treponema pertenuae, Leptospira, Rickettsia, and Actinomyces israeli.

Other Reference Publication (73):

Raz E et al., Preferential induction of a Th1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization. Proc Natl Acad Sci USA 93(10):5141-5, May 14, 1996.

**WEST**

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L3: Entry 3 of 4

File: USPT

Jan 15, 2002

DOCUMENT-IDENTIFIER: US 6339068 B1

TITLE: Vectors and methods for immunization or therapeutic protocols

Detailed Description Text (4):

DNA vaccines have been found to induce potent humoral and cell-mediated immune responses. These are frequently Th1-like, especially when the DNA is administered by intramuscular injection (Davis, H. L. (1998) *Gene-based Vaccines*. In: *Advanced Gene Delivery: From Concepts to Pharmaceutical Products* (Ed. A. Rolland), Harwood Academic Publishers (in press); Donnelly et al., *Life Sciences* 60:163, 1997; Donnelly et al., *Ann Rev. Immunol.* 15:617, 1997; Sato et al., *Science* 273:352, 1996). Most DNA vaccines comprise antigen-expressing plasmid DNA vectors. Since such plasmids are produced in bacteria and then purified, they usually contain several unmethylated immunostimulatory CpG-S motifs. There is now convincing evidence that the presence of such motifs is essential for the induction of immune responses with DNA vaccines (see Krieg et al., *Trends Microbiology*. 6: 23-27, 1998). For example, it has been shown that removal or methylation of potent CpG-S sequences from plasmid DNA vectors reduced or abolished the in vitro production of Th1 cytokines (e.g., IL-12, IFN- $\alpha$ , IFN- $\gamma$ ) from monocytes and the in vivo antibody and CTL response against an encoded antigen ( $\beta$ -galactosidase) (Sato et al., 1996, supra; Klimnan et al., *J. Immunol* 158: 3635-3639 (1997). Potent responses could be restored by cloning CpG-S motifs back into the vectors (Sato et al., 1996, supra) or by coadministering CpG-S ODN (Klinan et al., 1997, supra). The humoral response in monkeys to a DNA vaccine can also be augmented by the addition of *E. coli* DNA (Gramzinski et al., *Molec. Med.* 4: 109-119, 1998). It has also been shown that the strong Th1 cytokine pattern induced by DNA vaccines can be obtained with a protein vaccine by the coadministration of empty plasmid vectors (Leclerc et al., *Cell Immunology*. 170: 97-106, 1997).

Detailed Description Text (44):

Examples of infectious bacteria to which stimulation of a protective immune response is desirable include: *Helicobacter pyloris*, *Borellia burgdorferi*, *Legionella pneumophila*, *Mycobacteria* sps (e.g. *M. tuberculosis*, *M. avium*, *M. intracellulare*, *M. kansaii*, *M. gordonae*), *Staphylococcus aureus*, *Neisseria gonorrhoeae*, *Neisseria meningitidis*, *Listeria monocytogenes*, *Streptococcus pyogenes* (Group A *Streptococcus*), *Streptococcus agalactiae* (Group B *Streptococcus*), *Streptococcus (viridans group)*, *Streptococcus faecalis*, *Streptococcus bovis*, *Streptococcus (anaerobic sps.)*, *Streptococcus pneumoniae*, pathogenic *Campylobacter* sp., *Enterococcus* sp., *Haemophilus influenzae*, *Bacillus anthracis*, *Corynebacterium diphtheriae*, *Corynebacterium* sp., *Erysipelothrix rhusiopathiae*, *Clostridium perfringens*, *Clostridium tetani*, *Enterobacter aerogenes*, *Klebsiella pneumoniae*, *Pasturella multocida*, *Bacteroides* sp., *Fusobacterium nucleatum*, *Streptobacillus moniliformis*, *Treponema pallidum*, *Treponema pertenue*, *Leptospira*, and *Actinomyces israeli*.

Detailed Description Text (260):

Leclerc, C., Deriaud, E., Rojas, M. and Whalen, R. G. The preferential induction of a Th1 immune response by

DNA-based immunization is mediated by the immunostimulatory effect of plasmid DNA. Cell Immunology. 170: 97-106 (1998).

Detailed Description Text (269):

Raz, E., Tighe, E., Sato, Y., Corr, M., Dudler, J. A., Roman, M., Swain, S. L., Spiegeberg, H. L. and Carson, D. A. Preferential induction of a TH1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization. Proc. Natl. Acad. Sci. USA. 93: 5141-5145 (1996).

Detailed Description Text (275):

Swain, S. L., Spiegeberg, H. L. and Carson, D. A Preferential induction of a TH1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization. Proc. Natl. Acad. Sci. USA. 93: 5141-5145 (1996).

Other Reference Publication (87):

Leclerc C et al., The preferential induction of a Th1 immune response by DNA-based immunization is mediated by the immunostimulatory effect of plasmid DNA. Cell Immunol 179(2):97-106, 1997.

Other Reference Publication (108):

Raz E et al., Preferential induction of a Th1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization. Proc Natl Acad Sci USA 93(10):5141-5, May 14, 1996.

TITLE: Superantigen based methods and compositions for treatment of diseases

1/03 updated west 108

Detailed Description Text (468):

Previous studies showed that presensitized tumor draining lymph node cells when further stimulated with superantigens in vitro produced tumor specific effector cells capable of secreting IFN.gamma. and killing tumor in vivo. These cells appeared to be the major effectors of the tumoricidal response. An additional modality for induction of TH-1 or cytotoxic T cells is to immunize the host intradermally or intramuscularly (a gene gun may be used) with a plasmid encoding DNA for a tumor peptide known to induce rejection. Examples of such peptides include the MAGE-1 and MART-1 peptides from human melanoma. Genes and cDNA from these and other tumor associated peptides have been isolated and they may be readily employed for host immunization. Heat shock protein conjugated to tumor associated peptide cDNA may be used to chaperone tumor associated DNA into tumor cells. These transfected tumor cells will readily express class I molecules as well as the transfected tumor peptides and activate cytotoxic T cells. Shortly after cDNA injection in vivo, regional lymph nodes or host immunocytes will be extracted or removed and placed in tissue culture. Pure T cell cultures obtained in this fashion will be enriched in TH-1 T cells. They will then be incubated with superantigens for up to 72 hours (with or without transforming growth factor) and then with IL-2 to further expand the TH-1 population. Heat shock protein-tumor antigen transfected tumor cells may be used in vivo as the initial immunization step followed by the superantigen-IL-2 stimulation steps in vitro as given above. The HSP-tumor antigen transfected tumor cells may be used for in vitro stimulation of T cells followed by superantigen-IL-2 expansion after in vivo cDNA immunization with a tumor associated plasmid. These treatments will result in an enriched and expanded TH-1 and/or a cytotoxic T cell population. Such expanded T cells will then be harvested and infused into tumor bearing hosts used for tumor immunotherapy as given in the protocols described in latter sections.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc
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Terms	Documents
plasmid near50 th-1	2

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 2 of 2 returned.**☐ 1. Document ID: US 6458359 B1

L1: Entry 1 of 2

File: USPT

Oct 1, 2002

DOCUMENT-IDENTIFIER: US 6458359 B1

TITLE: CHIMERIC GENE FORMED BY THE DNA SEQUENCES THAT ENCODE THE ANTIGENIC DETERMINANTS OF FOUR PROTEINS OF L. INFANTUM AND PROTEIN ENCODED BY SAID GENE, AND PHARMACUETICAL COMPOSITION USEFUL FOR PREVENTING AND/OR TREATING LEISHMANIOSIS IN ANIMALS OR HUMANS

Detailed Description Text (64):

The first DNA vector to be administered as a vaccine contained the gp63 gene. Also, the PSA-2 gene has been introduced into a plasmid and it has been observed that it generates a Th-1 response and induction of protection. Vaccination with DNA plasmids which contain Ag-2 induce a Th-1 response and protect against infection with L. major, while Ag-2 in stimulators immune complexes elicits a combined Th-1 and Th-2 response and does not protect despite the fact that IFN- $\gamma$  is induced. Equally, the gene encoding the LACK protein has been administered subcutaneously to BALB/c mice, in an expression vector which expresses the protein under the control of the cytomegalovirus promoter, and protection against infection with L. major has been observed. In almost all cases in which DNA has been administered, the route has been intramuscular, although intradermal injection of particulate DNA must also be explored, as it requires a smaller amount of DNA. Other immunisation systems use vectors such as Salmonella, BCG or Vaccinia virus. It is interesting to remark that the inclusion of the gp63 gene in BCG is capable of inducing protection against L. major.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc
Image												

☐ 2. Document ID: US 6340461 B1

L1: Entry 2 of 2

File: USPT

Jan 22, 2002

DOCUMENT-IDENTIFIER: US 6340461 B1